ACC.14
TCT@ACC-i2 | innovation in intervention

A1352
JACC April 1, 2014
Volume 63, Issue 12

Prevention

BEHAVIORAL LOCUS OF CONTROL AND REDUCTION OF CARDIOVASCULAR DISEASE RISK

Poster Contributions
Hall C
Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Prevention: Diabetes, Obesity, and Lifestyle
Abstract Category: 20. Prevention: Clinical
Presentation Number: 1144-142

Authors: *Val Rakita, Carol Homko, Abul Kashem, Alfred Bove, Temple University Hospital, Philadelphia, PA, USA*

Background: Cardiovascular disease (CVD) is not only one of the most widespread chronic illness in the United States, but is also the leading cause of morbidity and mortality. While age, sex and ethnic background may influence ability to lower CVD risk, risk modification may also be the function of differences in multidimensional health locus of control (MDHLC), which can influence decision making about healthy behaviors.

Methods: Secondary analysis of a prospective, randomized trial (NCT00778804) among underserved inner-city and rural populations (n=388) with a 10% or greater CVD risk (Framingham 10 year risk score). Subjects were followed for one year and were seen for quarterly review of health status. Subjects were asked to fill out a Behavioral Locus of Control Questionnaire to assess their beliefs with regards to health-related issues and determine their MDHLC (Internal, Powerful Others, or Chance).

Results: The average patient age was 61.3 ± 10.1 years, average A1C was 6.7 ± 1.6%, average total cholesterol was 201 ± 44 mg/dl. The average BMI was 31.8 ± 6.4 kg/m2, and the average blood pressure was 146 ± 18/ 82 ±11 mmHg The average Framingham risk score was 17.6%. In a univariate analysis, those with the Internal Locus of Control (p=0.01) and Powerful Others Locus of Control (p=0.005) showed statistical significance with respect to CVD risk reduction. In multivariate logistical regression, there was no association between age, gender, ethnicity, and health knowledge with CVD risk reduction, while both Internal and Powerful Others Loci of Control trended towards significance.

Conclusion: Traditional views of risk factor modification have not shown to be as promising as once thought. Targeting patients' locus of control and focusing on behavioral modification, specifically taking advantage of their internal motivations and their response to external influence, can lead to more significant CVD risk reduction.